Bicyclist Signing Guidelines



April, 2009



Introduction

This paper describes the Montana Department of Transportation's (MDT) current practices related to bicyclist safety and signing issues and presents guidelines for MDT responses to requests for signs intended to improve bicyclist safety by making motorists more aware of bicyclist traffic.

Bicycling has steadily gained popularity and attention over the last twenty years both nationally and in Montana. MDT has responded to this situation by creating the Community Transportation Enhancement Program (CTEP), which provides funding for bicycle and pedestrian facilities in Montana's communities, and by considering bicyclist needs in the design of major highway projects. These efforts have resulted in a 39% increase in public satisfaction with bicyclist facilities since 1994, according to the 2007 *Biennial TranPlan 21 Public Involvement Survey*.

Although state and local efforts have resulted in a significant increase in the number and condition of bicyclist and pedestrian facilities, the width of many Montana roads and streets still requires bicyclists and motor vehicles to operate very close to each other. Bicyclists often suggest signing as a cost-effective way to improve safety in these areas by increasing driver awareness of the presence of bicyclists.

Examples of bicycle related signs can be found in the Manual of Uniform Traffic Control Devices (MUTCD) and include: regulatory signs for bicycle facilities, warning signs for bicycle facilities, and guide signs for bicycle facilities. "Share the Road" signs are among the most common bicycle-related signage. "Share the Road" signs are often used together with a bicycle silhouette sign.

Other sign options include "Watch for Bicyclists" or "Bicyclists Ahead".

Background

Unlike in most other states, all roads in Montana that are open to public travel by a motorized vehicle are also open to bicyclists. In addition, MCA 61-8-602 specifies that "Every person operating a bicycle shall be granted all of the rights and shall be subject to all of the duties applicable to the driver of any other vehicle...".

Montana's statewide transportation plan, *TranPlan 21*, addresses a range of policy goals and actions to institutionalize bicycle and pedestrian modes of transportation. In addition, Montana law (MCA 60-3-30), addresses bicycle and pedestrian funding and sets minimum annual spending requirements for footpaths and bicycle trails. MDT has historically exceeded these requirements.

MDT has also established a full time bicycle/pedestrian coordinator position to facilitate statewide bicycle and pedestrian planning. This position provides technical assistance to state and local government agencies, distributes bicycle tourist information, acts as a

clearing house for bicycle and pedestrian safety information and ensures that bicycle and pedestrian issues are consistently addressed early in the project development process.

Bicycling groups, local officials, and individuals periodically request "Share the Road" signs or signs with similar messages. In the past, MDT has turned down these requests due to the absence of consistent standards and concerns about maintenance costs, potential liability issues, and sign proliferation. There is also little statistical evidence that permanent signs contribute to improved safety especially in areas where bicyclist traffic is seasonal and/or sporadic. This is an important consideration in deciding to install signs that are themselves potential road hazards that could also block views of essential warning signs. In addition, unlike with passenger and commercial vehicle traffic, it is difficult to collect bicycle traffic volume data necessary to provide quantifiable criteria for a signing policy. MDT and other road management agencies must therefore rely on observed or perceived traffic volumes in developing signing standards.

Related Practices

MDT is involved in the following activities that support and encourage safe bicycle travel:

- MDT's website provides information on State bicycling laws, traffic data, and contact information for bicyclist clubs and shops.
- The Bicycle and Pedestrian Coordinator and District Offices manage a program that provides free portable "BIKES ON ROADWAY" signs to bicycling event organizers.
- MDT participates in safety fairs to promote bicycle and pedestrian safety.
- MDT's Bicycle and Pedestrian Coordinator reviews proposals for major new highway projects early in the process to identify potential bicyclist and pedestrian issues.
- MDT has considered bicyclist needs in the development and implementation of its rumble strip policy. For example, MDT reduced the proposed width of rumble strips in its original rumble strip policy in response to suggestions from bicyclists. Later adjustments included the provision of regular gaps in rumble strips to allow bicyclists to move on and off the shoulder. The policy also allows for the omission of rumble strips on roadways with shoulders 4' or less.
- MDT publishes and distributes a map that provides key highway information for bicyclists including shoulder widths, traffic volumes, and rumble strip locations.
- MDT considers bicyclist needs, as appropriate, in the design of major highway projects. This consideration, which includes input from the public and local

officials through the project's public involvement process, can result in wider shoulders or separated paths in rural or suburban areas or signed bicycle lanes in urban environments. Wider shoulders in rural areas have the added benefit of improving safety for all highway users.

- In cooperation with the Montana Highway Patrol, MDT has developed and distributed "Share the Road" bumper stickers, window transparencies, and posters to schools, clubs, and individuals. Rather than focus on one type of highway user, this material presents a general "Share the Road" message in recognition of the importance of sharing the road with all other highway users.
- In recognition of the multi-modal value of the "Share the Road" message, MDT is also evaluating the cost and potential effectiveness of installing signs on key locations along Montana highways such as on two-lane highways at entrances to Montana.

Guidelines

Local governments or bicycle clubs* can submit requests for signs to MDT district or headquarters staff. Requests must include the proposed location for the signs and a commitment of non-MDT funding for the sign costs.

MDT staff will review the requests based on the following evaluation criteria. If criteria are met, MDT maintenance staff will construct, install, and maintain the signs. If criteria are not met, but sign placement is deemed appropriate after engineering review, MDT and the requesting entity will share the cost of the sign installation, while MDT maintenance staff will construct, install, and maintain the signs. MDT's Bicycle and Pedestrian Coordinator will maintain a record of requests and sign locations.

Evaluation Criteria

- 1. Requestor and/or MDT staff verify that route is used by bicyclists on a continuous basis over several seasons. If not, signs will not be installed. If yes, proceed to criteria # 2.
- 2. Sites are limited to rural and transitional areas with a posted speed limit of 45 mph or greater. If not, signs will not be installed. If yes, proceed to criteria #3.
- 3. Average annual daily traffic greater than 1,000. If not, signs will not be installed. If yes, proceed to criteria # 4.
- 4. Minimum paved surface width less than 24 feet. If yes, sign may be installed. If not, proceed to criteria # 5.

5. Usable shoulder width less than 2 feet. If yes, signs may be installed

Signs may not be installed in urban and suburban areas if sign clutter detracts from the effectiveness of the signs. In Montana's urban areas, MDT may develop agreements with city or county governments to install and maintain signs on MDT routes in accordance with criteria and standards described in the agreements.

The number and location of signs will be determined based on site conditions.

Exceptions to the above criteria may apply if the route is formally used as a bicycle club touring/practice route

* Bicycle clubs typically have bylaws, elected officers, and regularly scheduled meetings.

Sign Configuration & Cost

The color of all signs will be black on yellow. Yellow-green colored signs should be reserved solely for school crosswalks.



30" X 30", (AASHTO W11-1) -- In house cost: \$84



24" X 30", (AASHTO W16-1) -- In house cost: \$67

Total cost is \$151 per two-sign combination, not including the sign support, if constructed in house.

The sign support will likely be a 5 inch pole, which will cost \$8.25 per lineal foot if provided by MDT, or \$11.57 per lineal foot if purchased from a contractor. A 14-foot long pole will cost \$115 in house, and possibly \$162 through a contractor.

Using these estimates, a two-sign combination, including pole, will cost approximately \$266.47 in house.

Long term maintenance costs are not included in the above estimates.

Costs based on 2007 estimates----cost estimates will be updated periodically.